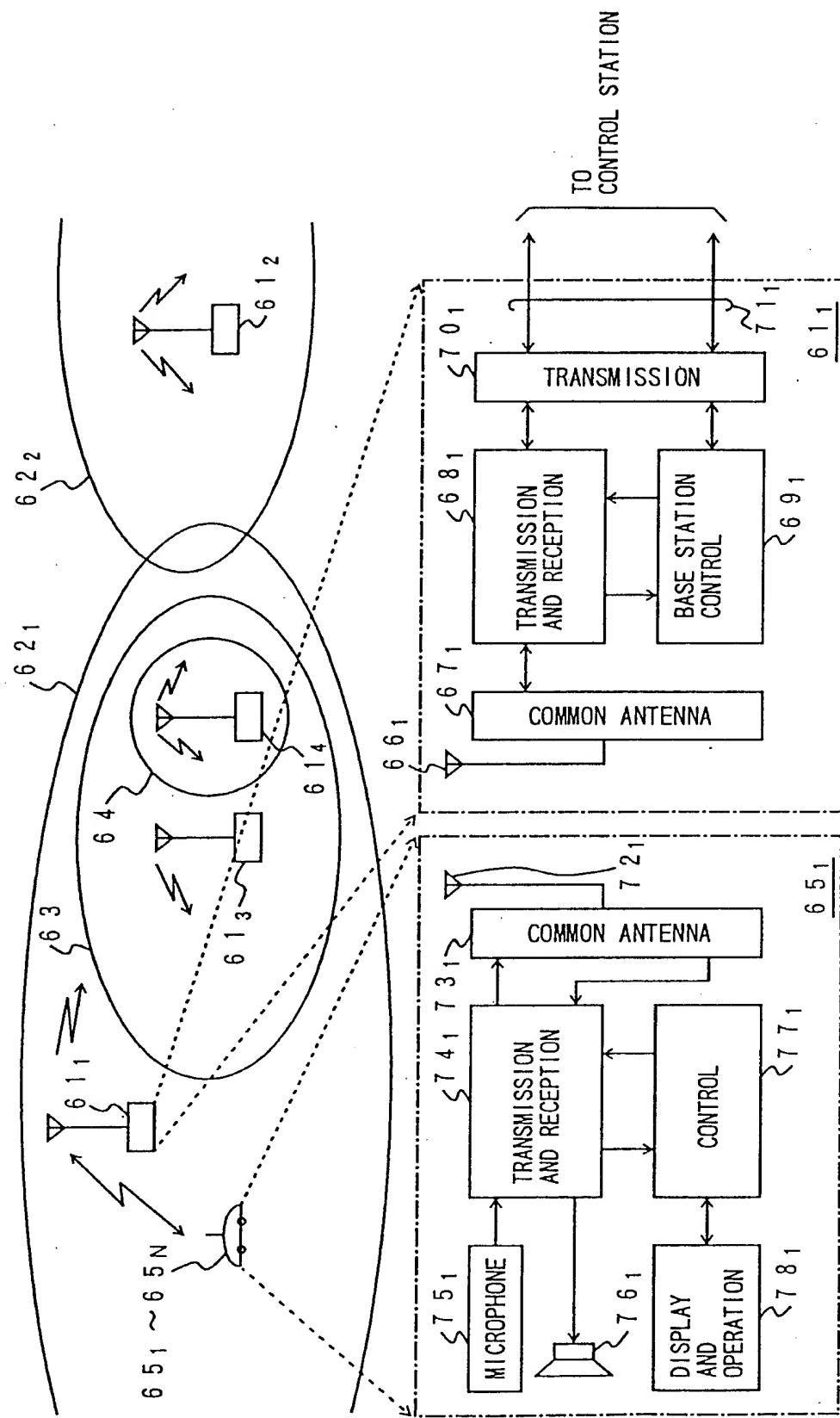


FIG. 1  
PRIOR ART

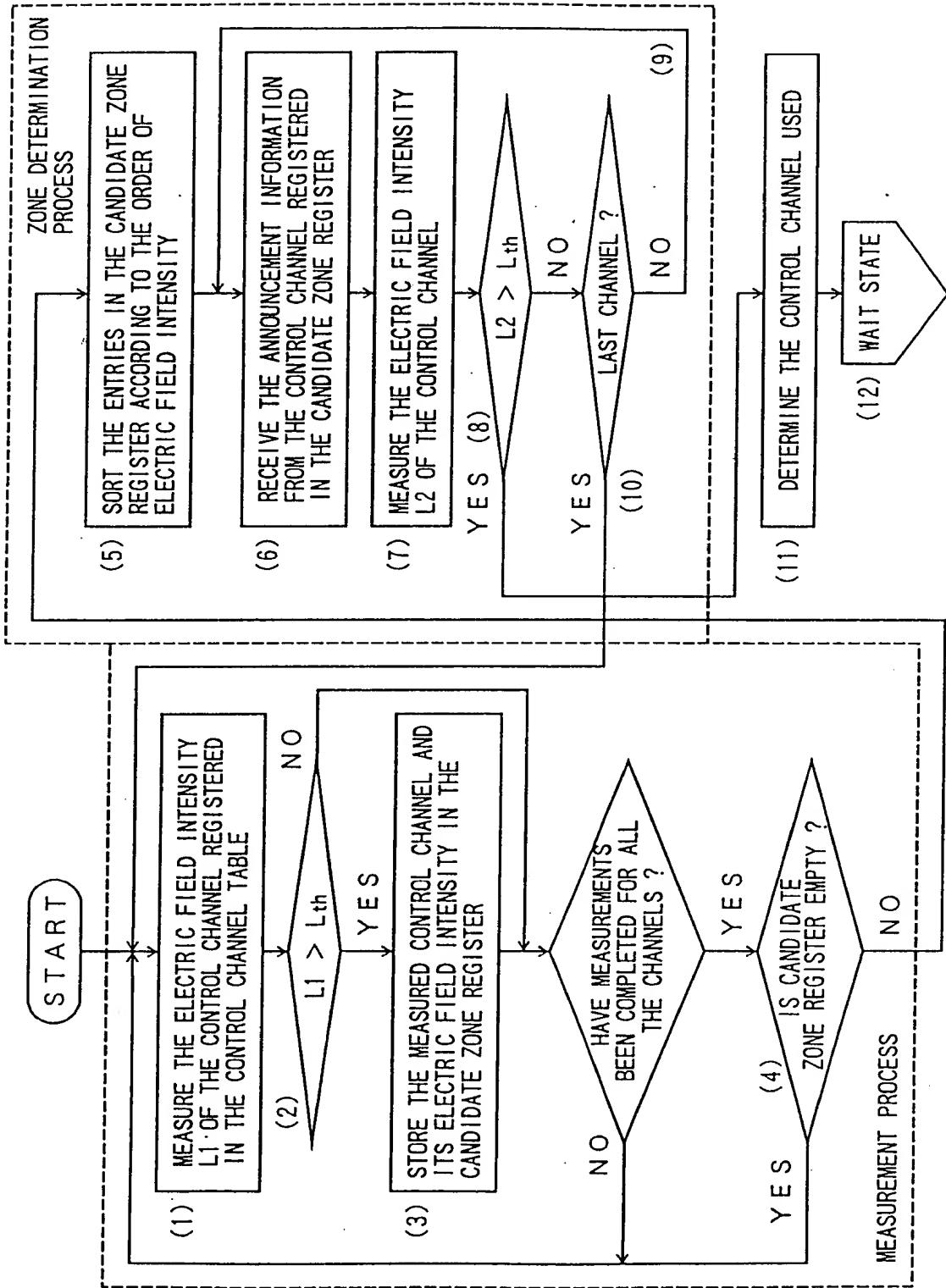


# FIG. 2

## PRIOR ART

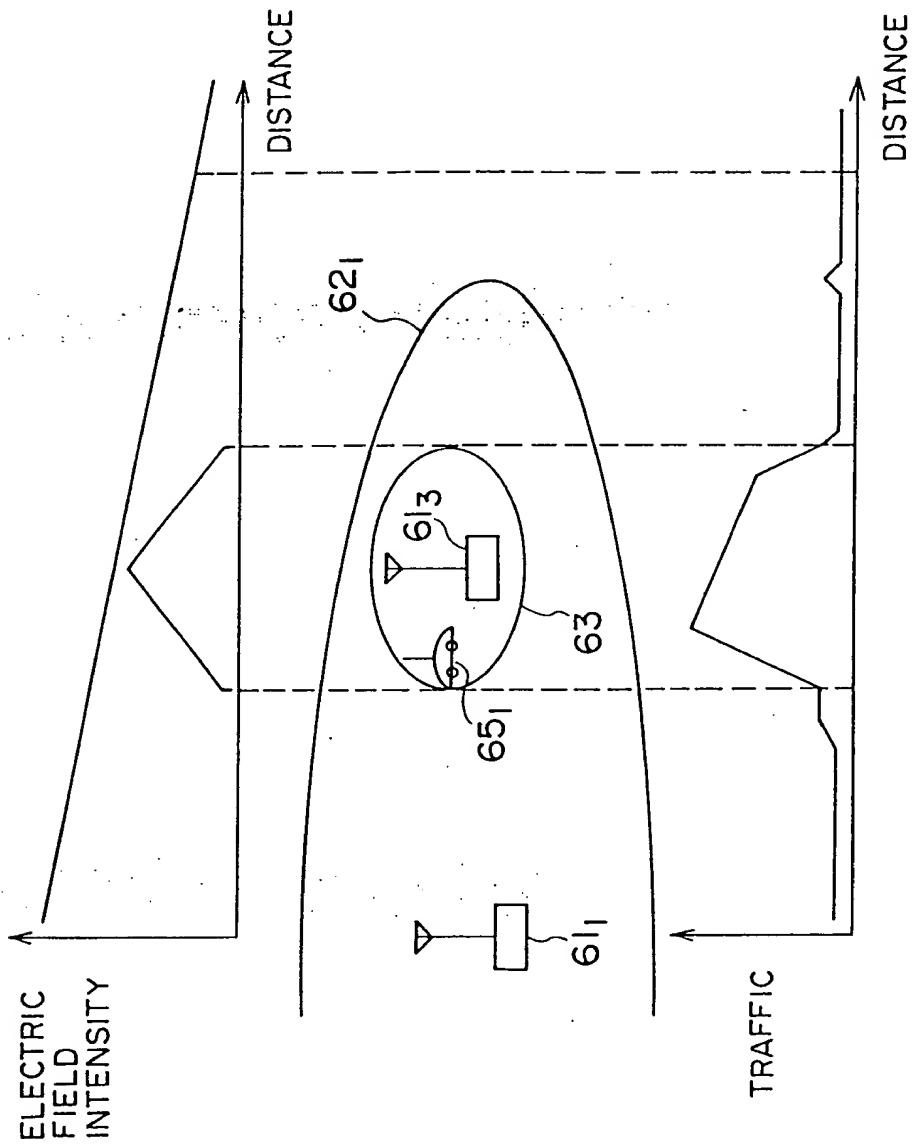
RESTRICTION
MESSAGE TYPE
NETWORK CODE
CONTROL INFORMATION
CONTROL CHANNEL CONFIGURATION INFORMATION
MOBILE STATION TRANSMISSION POWER SPECIFICATION
WAIT ENABLED LEVEL
WAIT DISABLED LEVEL
LOCATION REGISTERED AREA MULTIPLEX LEVEL
LOCATION CODE 1
⋮
LOCATION CODE N
MAXIMUM REPORTED NUMBER OF CHANNELS
⋮

FIG. 3  
PRIOR ART



4/32

FIG. 4  
PRIOR ART



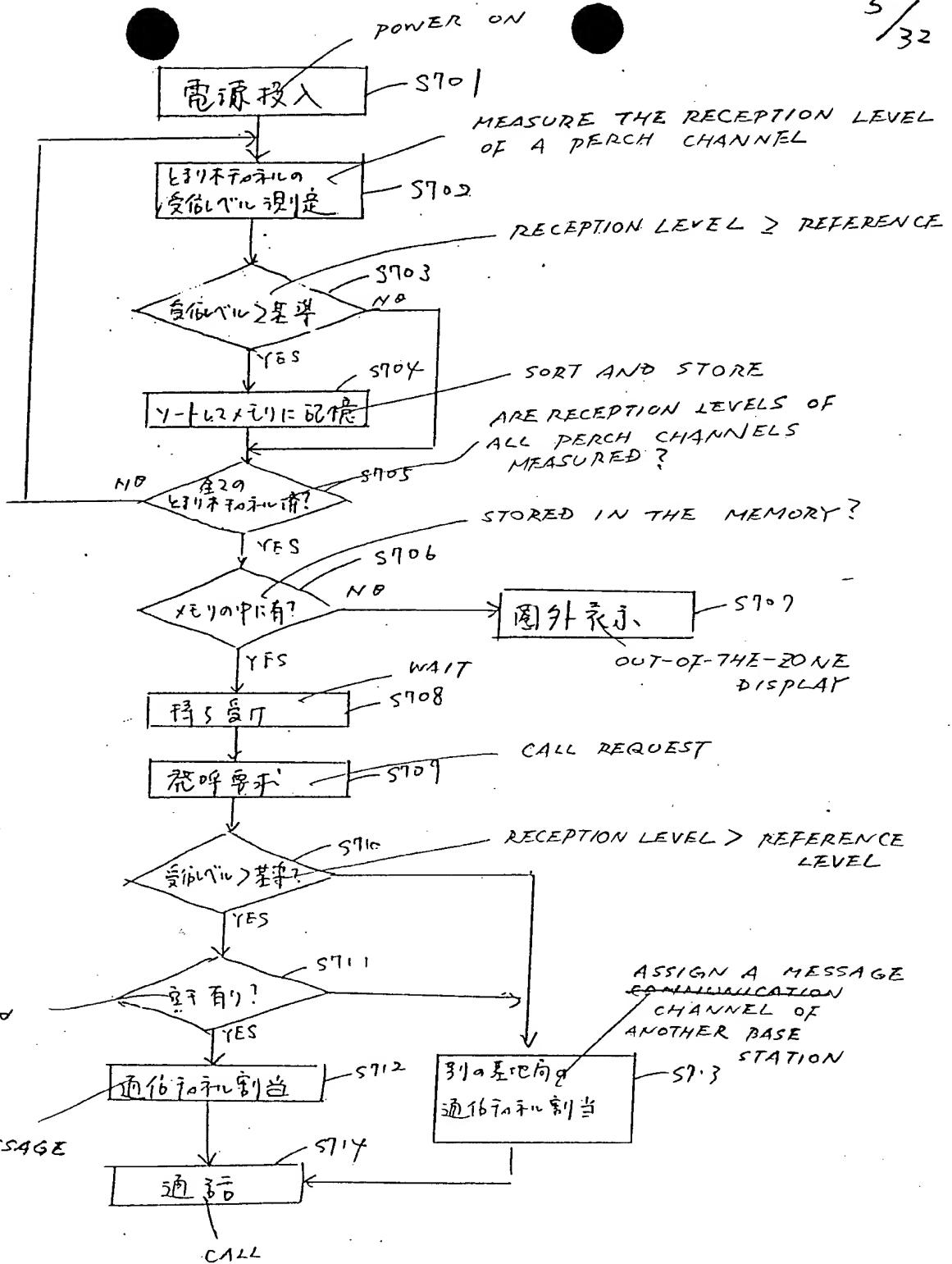
ANY UNUSED  
MESSAGE COMMUNICATION  
CHANNELASSIGN A MESSAGE  
COMMUNICATION  
CHANNEL

Fig. 5

PRIOR ART

FIG. 6

FIG. 5

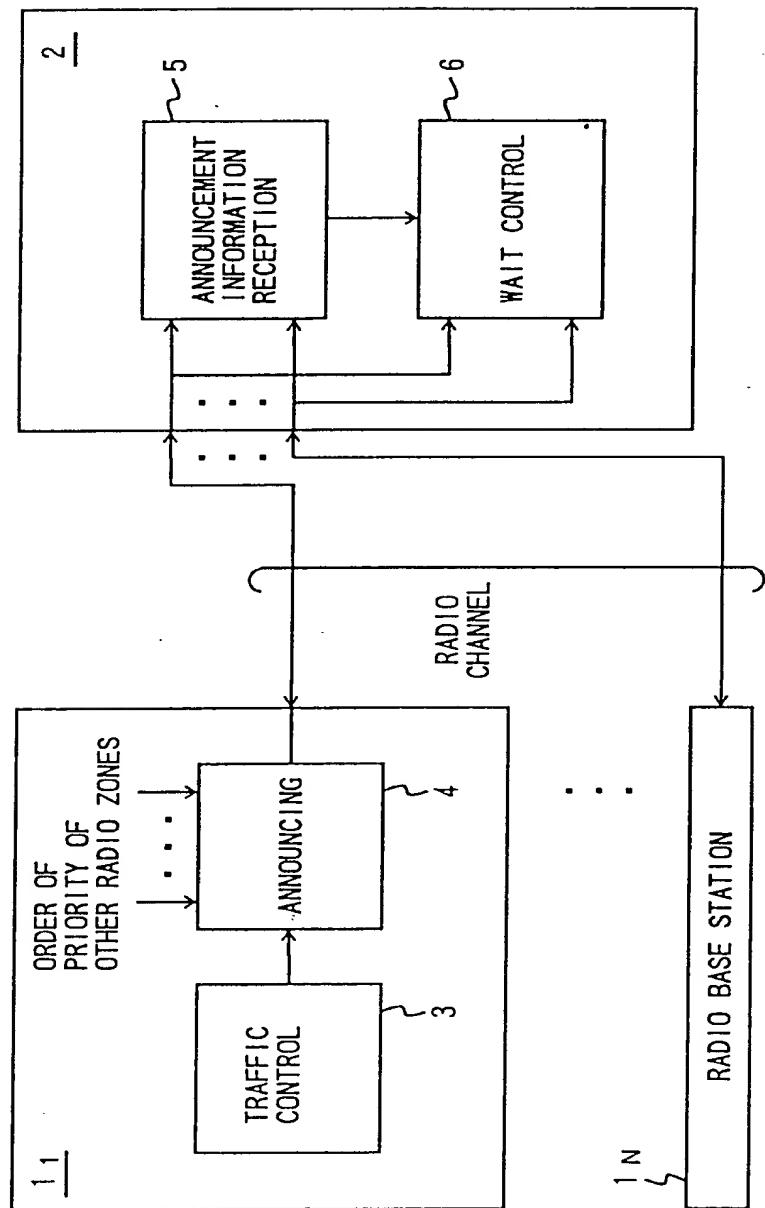


FIG. 6  
FIG. 7

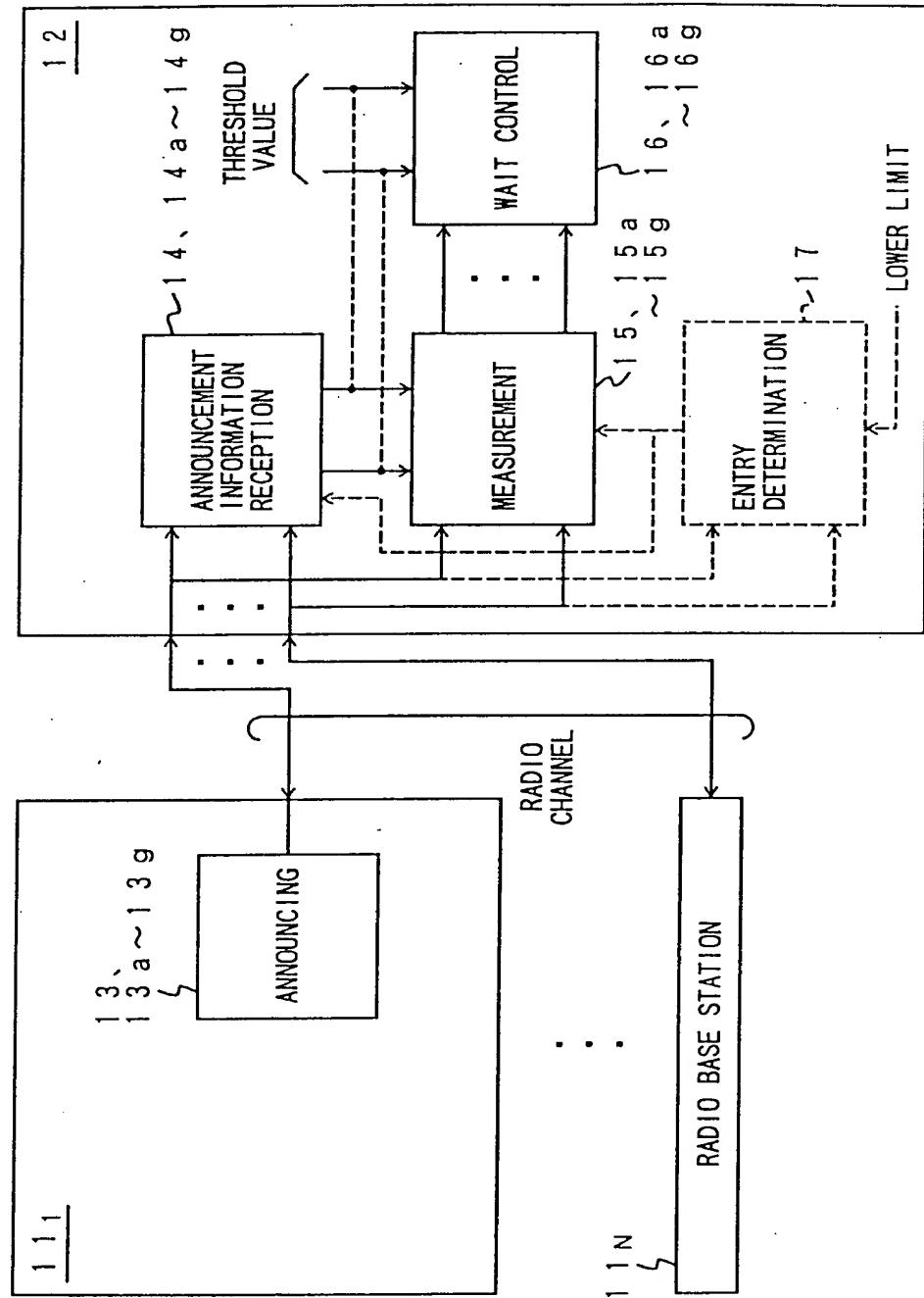


FIG. 7

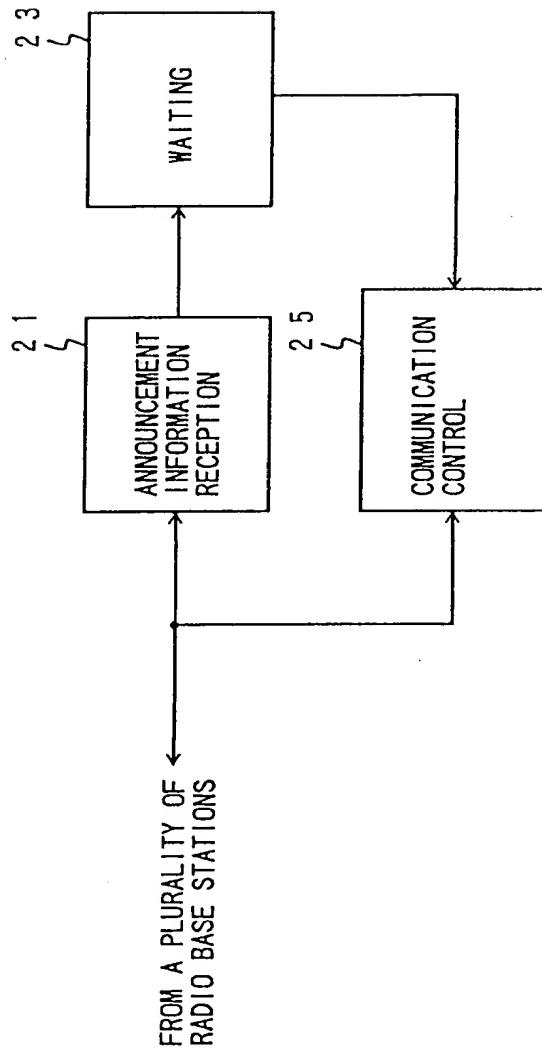
FIG. 7

FIG. 8

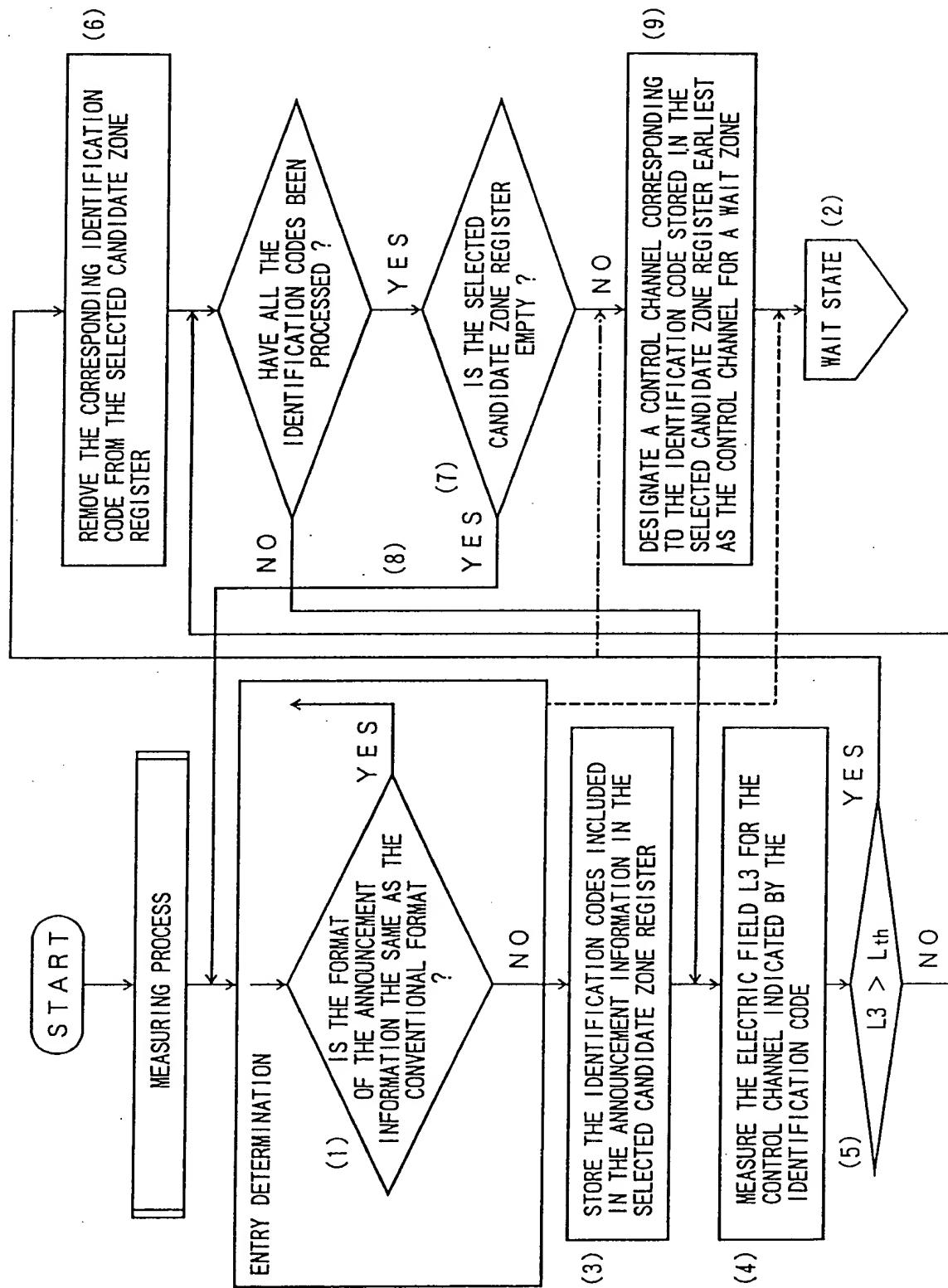


FIG. 10

FIG. 9

MESSAGE TYPE
MOBILE STATION TRANSMISSION POWER SPECIFICATION
CONTROL CHANNEL IDENTIFICATION CODE C4
CONTROL CHANNEL IDENTIFICATION CODE C3
CONTROL CHANNEL IDENTIFICATION CODE C1
WAIT ENABLED LEVEL (LOCAL)
WAIT DISABLED LEVEL (LOCAL)
LOCATION REGISTERED AREA MULTIPLEX LEVEL
•
•
•

## FIG. 10

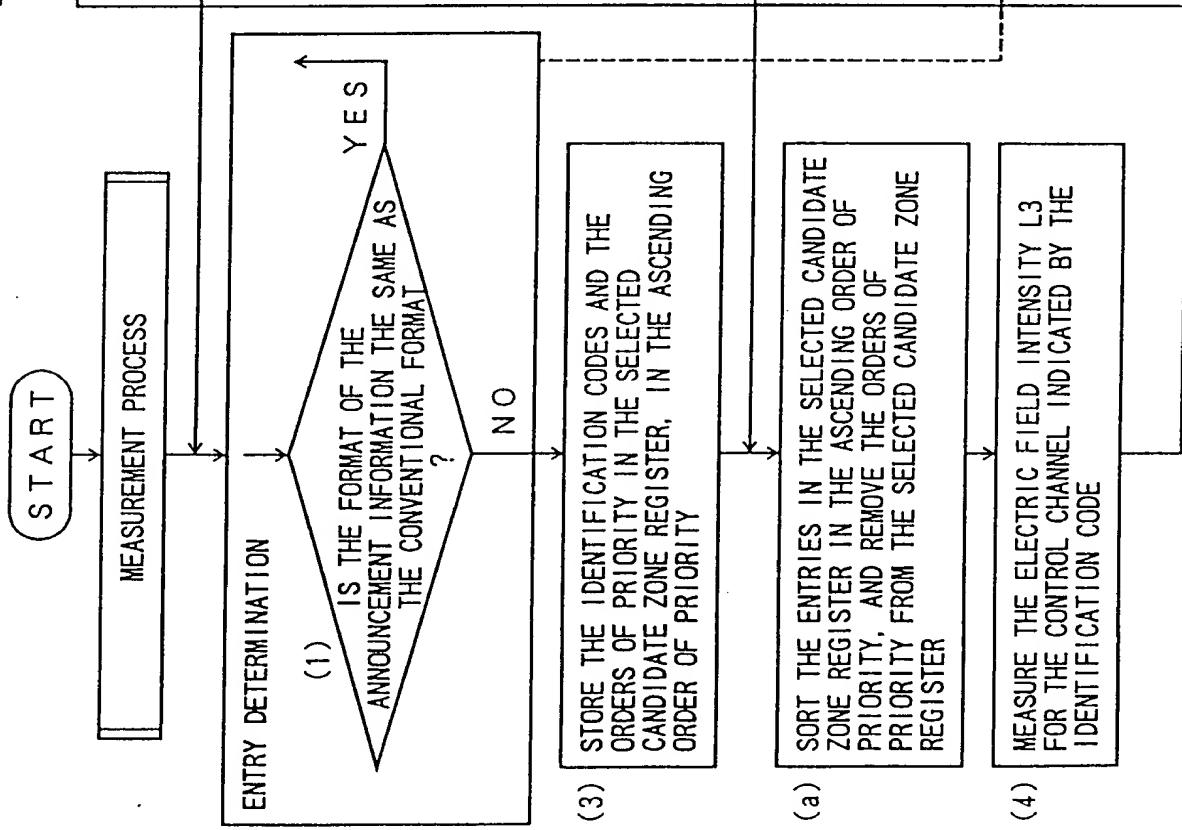
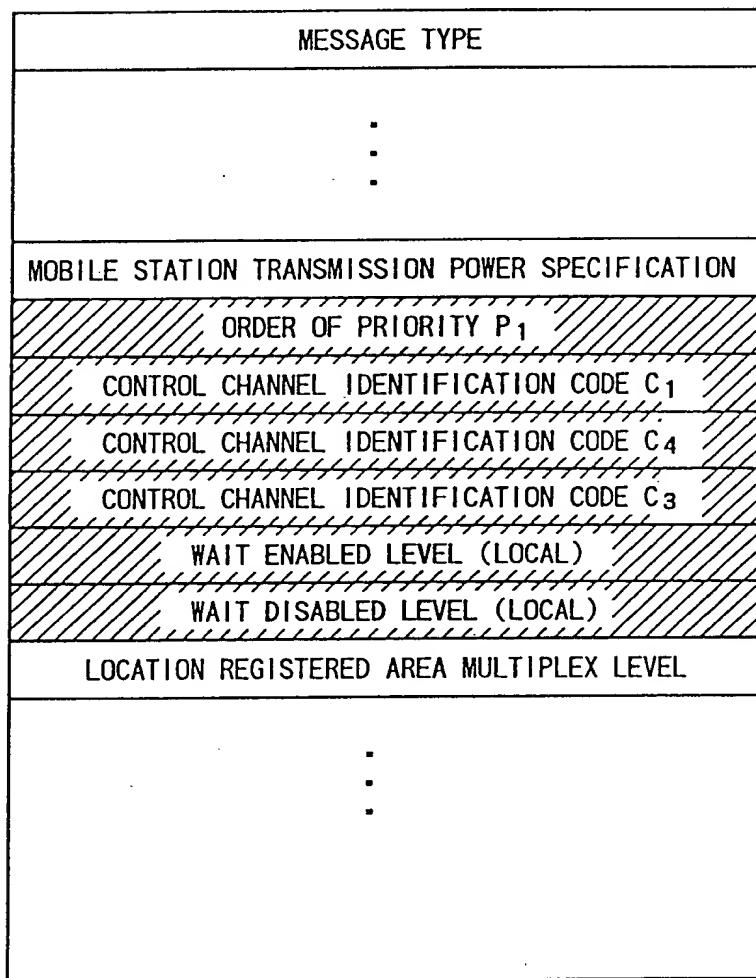


FIG. 12

FIG. 11

MESSAGE TYPE
MOBILE STATION TRANSMISSION POWER SPECIFICATION
CONTROL CHANNEL IDENTIFICATION CODE C <sub>1</sub>
ORDER OF PRIORITY P <sub>1</sub>
CONTROL CHANNEL IDENTIFICATION CODE C <sub>3</sub>
ORDER OF PRIORITY P <sub>3</sub>
CONTROL CHANNEL IDENTIFICATION CODE C <sub>4</sub>
ORDER OF PRIORITY P <sub>4</sub>
WAIT ENABLED LEVEL (LOCAL)
WAIT DISABLED LEVEL (LOCAL)
LOCATION REGISTERED AREA MULTIPLEX LEVEL

FIG. 13

~~FIG. 12~~

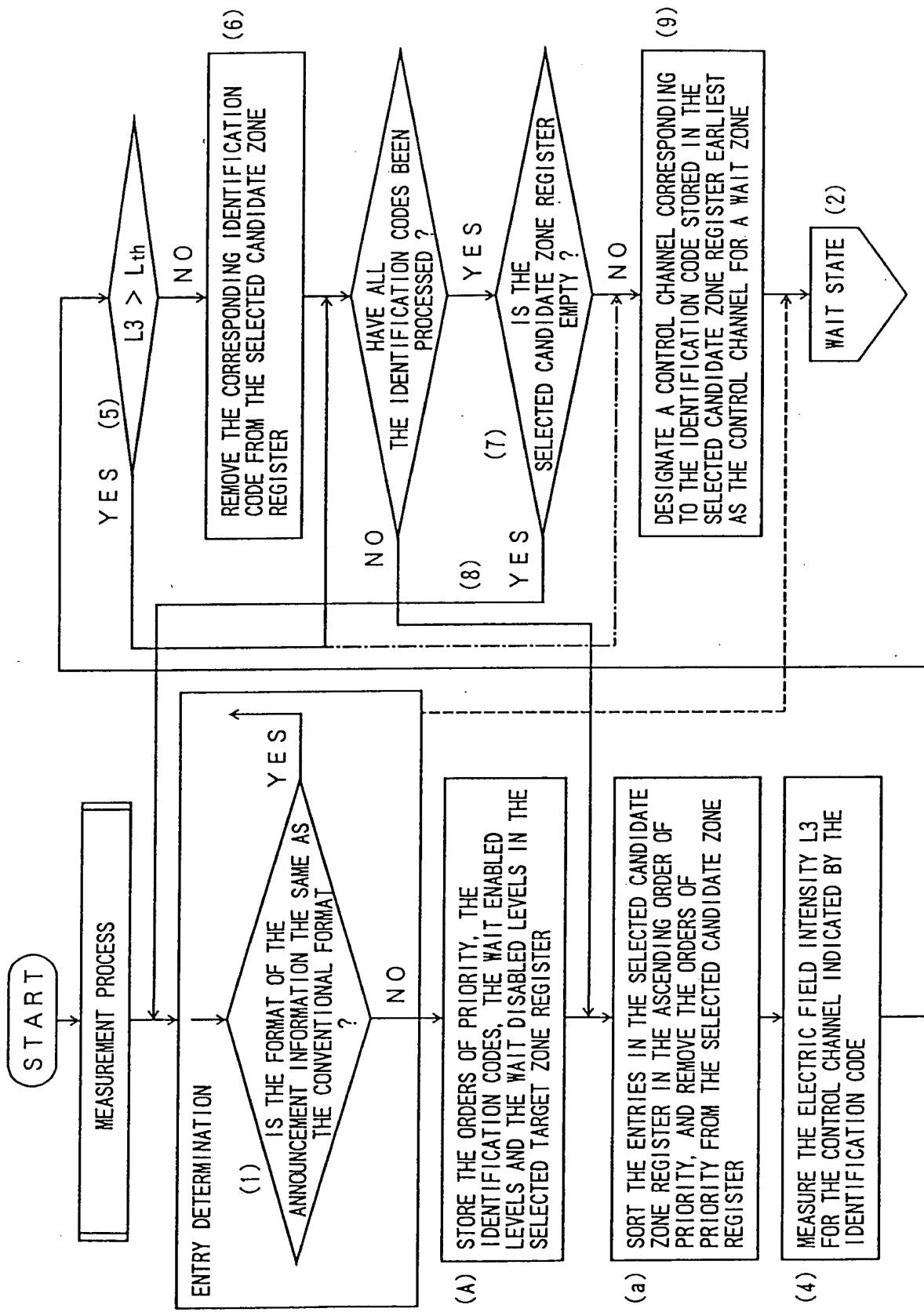


FIG. 15

FIG. 14

MESSAGE TYPE
•
•
•
MOBILE STATION TRANSMISSION POWER SPECIFICATION
ORDER OF PRIORITY P <sub>1</sub>
CONTROL CHANNEL IDENTIFICATION CODE C <sub>1</sub>
WAIT ENABLED LEVEL L <sub>th1</sub>
WAIT DISABLED LEVEL L <sub>th1</sub>
•
•
•
ORDER OF PRIORITY P <sub>4</sub>
CONTROL CHANNEL IDENTIFICATION INFORMATION C <sub>4</sub>
WAIT ENABLED LEVEL L <sub>th4</sub>
WAIT DISABLED LEVEL L <sub>th4</sub>
LOCATION REGISTERED AREA MULTIPLEX LEVEL
•
•
•

FIG. 15

FIG. 16

26220 " 59908220

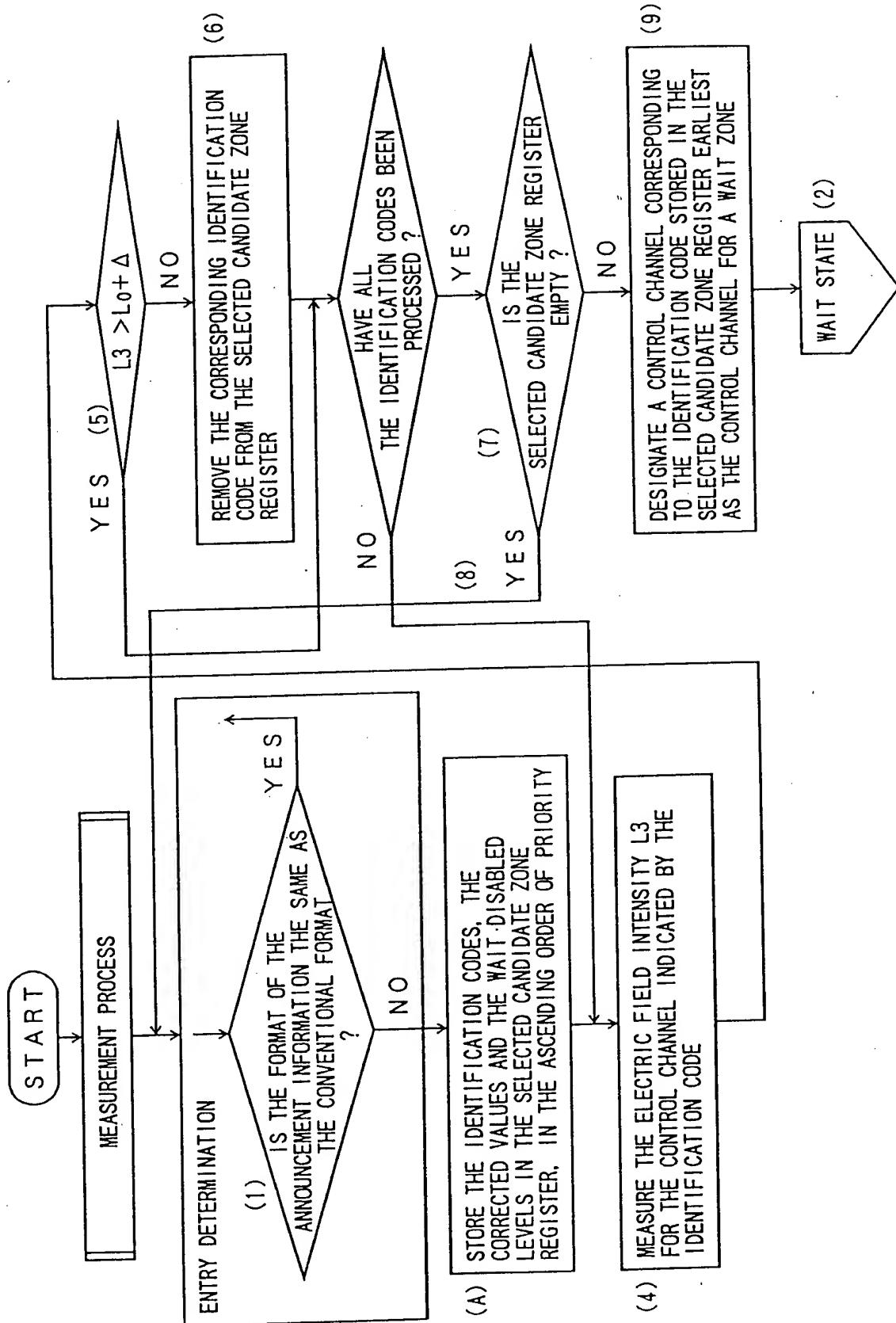


FIG. 17

~~FIG. 16~~

MESSAGE TYPE
MOBILE STATION TRANSMISSION POWER SPECIFICATION
ORDER OF PRIORITY P <sub>1</sub>
CONTROL CHANNEL IDENTIFICATION INFORMATION C <sub>1</sub>
CORRECTED VALUE Δ <sub>1</sub>
WAIT DISABLED LEVEL $\ell_{th1}$
ORDER OF PRIORITY P <sub>4</sub>
CONTROL CHANNEL IDENTIFICATION INFORMATION C <sub>4</sub>
CORRECTED VALUE Δ <sub>4</sub>
WAIT DISABLED LEVEL $\ell_{th4}$
LOCATION REGISTERED AREA MULTIPLEX LEVEL

FIG. 17

Fig. 17

ZIGGARUS

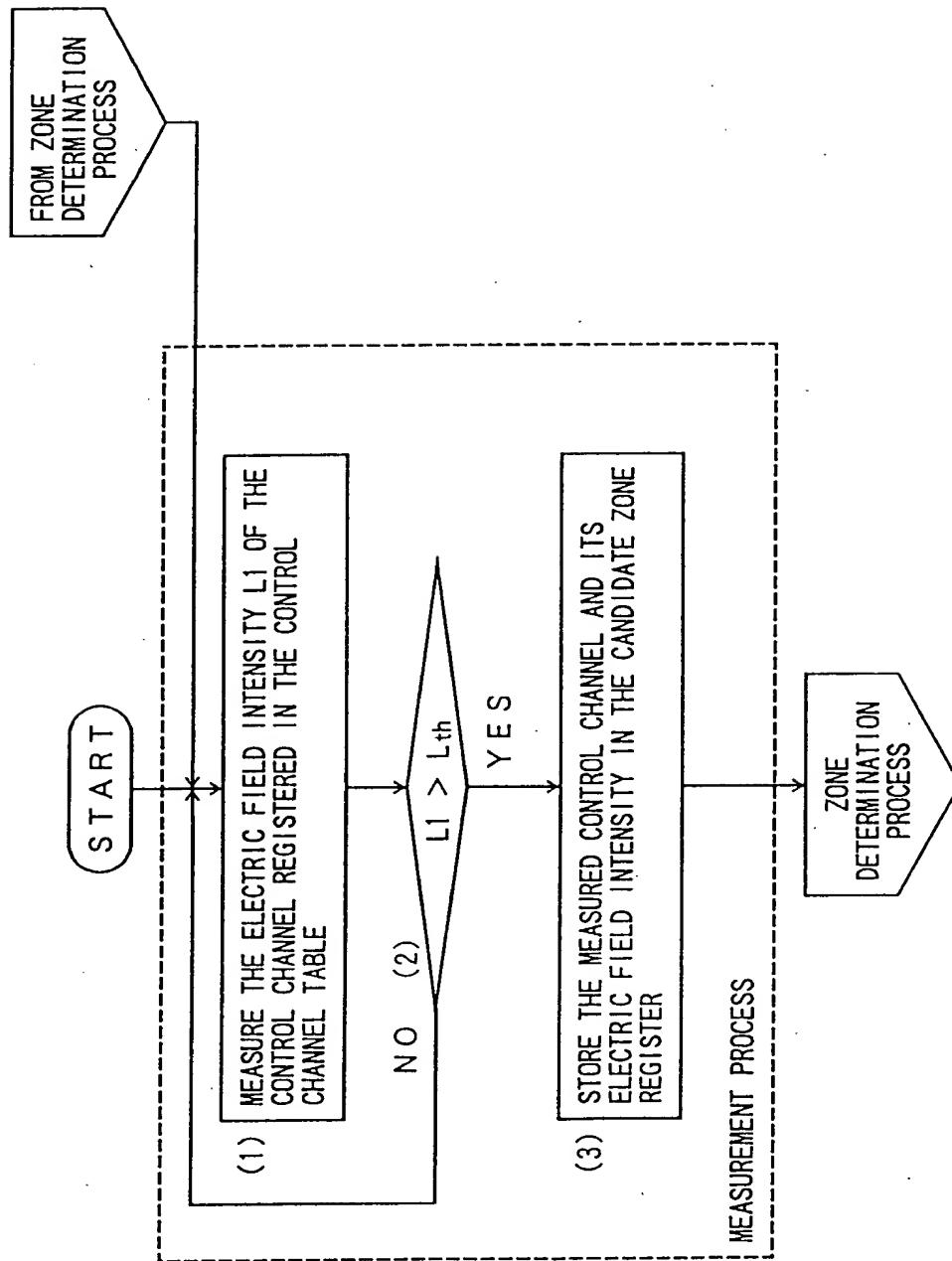
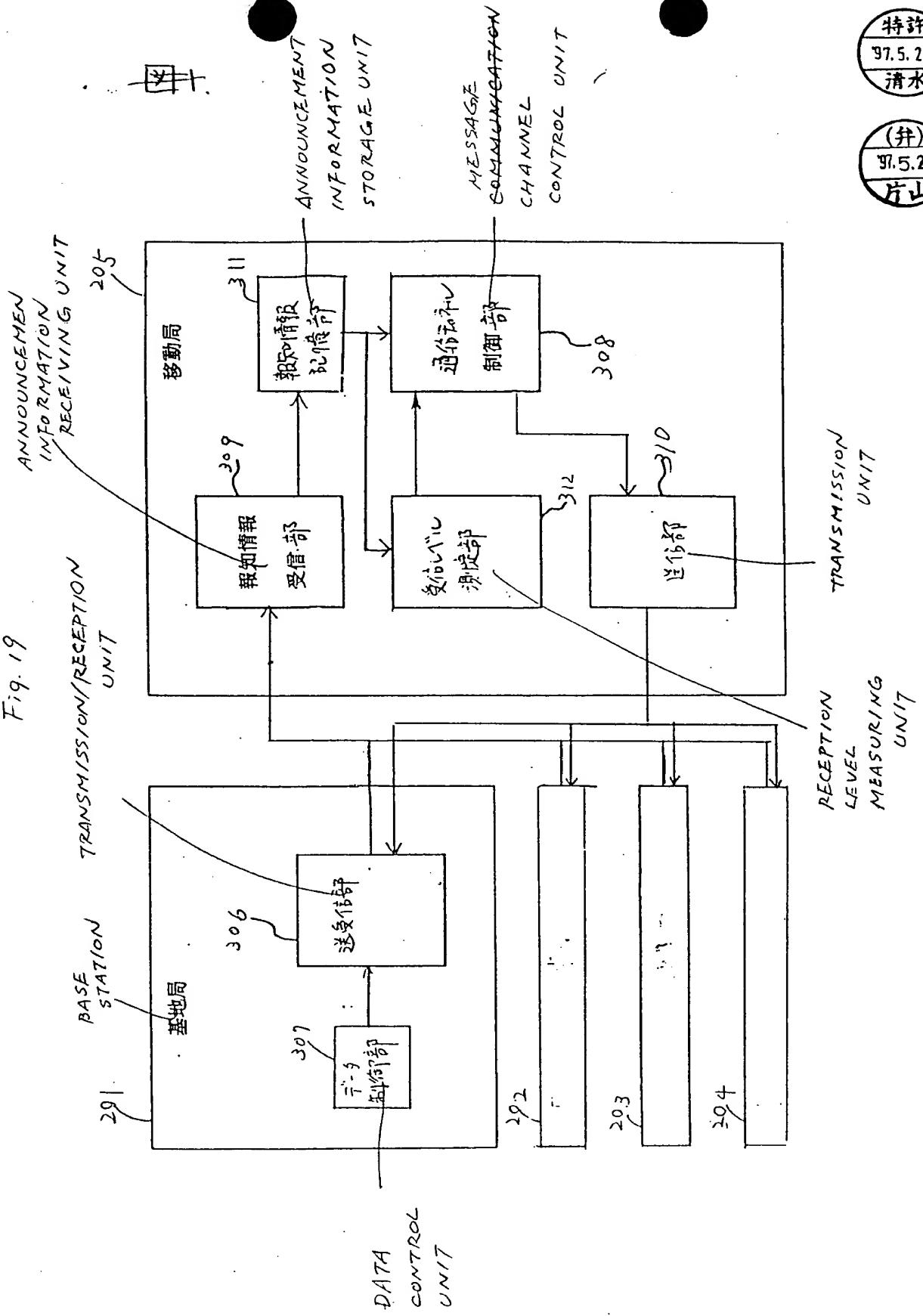
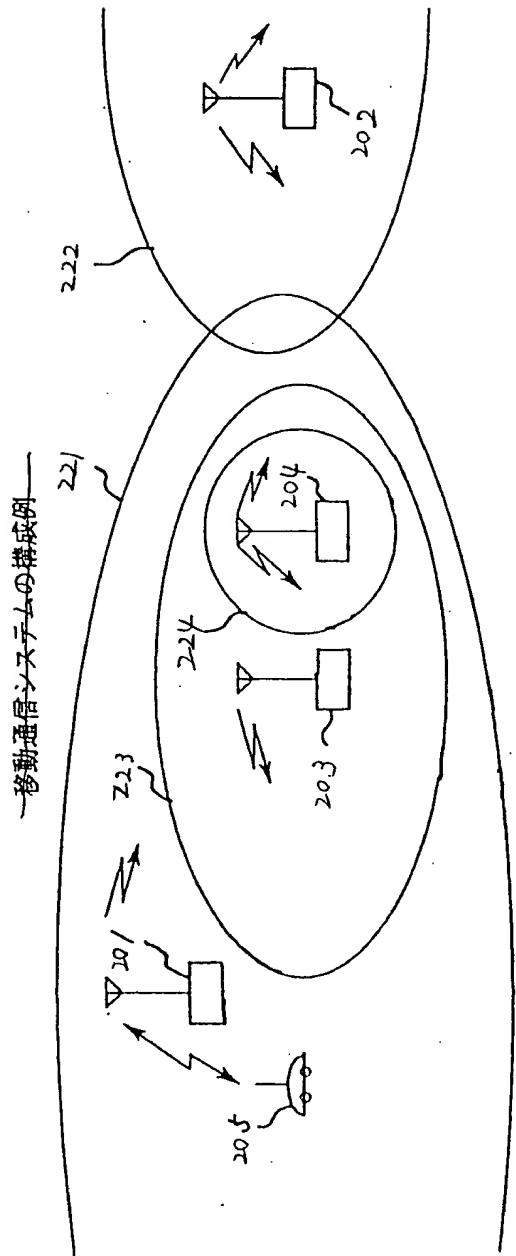


Fig. 19



72

Fig. 20

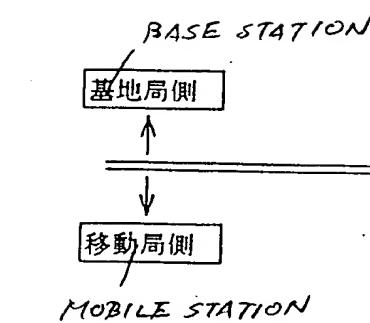


2/3

Fig. 21A

DATA CONTROL UNIT

2/32  
2/32



RECEPTION LEVEL  
MEASURING  
UNIT

送受信部

TRANSMISSION/RECEPTION UNIT

報知情報記憶部

ANNOUNCEMENT INFORMATION  
RECEIVING UNIT

受信レベル測定部

通信チャネル  
制御部

MESSAGE  
COMMUNICATION CHANNEL  
CONTROL UNIT

報知情報記憶部

通信チャネル  
制御部

Fig. 21B

(b)

制御部は、発着呼時、先に基地局から受信した選択優先順位情報を基に、選択優先順位の高い順に該当基地局からの受信レベルを測定する。

S1

移動局は発着呼の際に、選択優先順位基地局が高く、該当基地局からの受信レベルが、しきい値よりも高い基地局に対し、チャネル割り当て要求を送出する。

S2

#### 原理説明図

WHEN ORIGINATING A CALL OR RECEIVING A CALL,  
THE MOBILE STATION ISSUES A REQUEST FOR A  
MESSAGE COMMUNICATION CHANNEL TO THE HIGHEST-ORDER  
BASE STATION OF THOSE BASE STATIONS THAT PROVIDE  
A RECEPTION LEVEL HIGHER THAN A THRESHOLD LEVEL

#### MESSAGE

BEFORE ORIGINATING A CALL OR RECEIVING A CALL,  
THE COMMUNICATION CHANNEL CONTROL UNIT MEASURES  
THE LEVEL OF RECEPTION FROM THE BASE STATIONS  
IN THE DESCENDING ORDER OF PRIORITY, BASED ON  
THE ORDER OF PRIORITY RECEIVED FROM A BASE STATION

)/

報知情報の例

INFORMATION ENTRY

DIRECTION

DOWNSTREAM

REMARKS

MESSAGE TYPE	情報要素	方 向	備 考
MESSAGE TYPE	メッセージ種別	下り	
NETWORK CODE	網番号		
RESTRICTION INFORMATION	規制情報		
INFORMATION INDICATING THE ORDER OF PRIORITY	制御チャネル構造情報		
LOCATION CODE	移動局送信電力指定		制御チャネル用
OPTION CODE	選択優先順位情報		自局用
MAXIMUM NUMBER OF CHANNELS	待ち受け許可レベル		
OPTION CODE	待ち受け劣化レベル		
PERCH CHANNEL CODE	位置登録エリア多重数 (N)	1, 2, 4, 8, or 16	
PERCH CHANNEL CODE	位置番号	第1番目 1st	
PERCH CHANNEL CODE	S	S	
PERCH CHANNEL CODE	位置番号	第n番目 nth	
PERCH CHANNEL CODE	最大報告チャネル数	0~M	
PERCH CHANNEL CODE	在囲ゾーン/セクタ判定用 とまり木チャネル数 (M)	0~20	
PERCH CHANNEL CODE	とまり木チャネル番号	第1番目 1st	
PERCH CHANNEL CODE	S	S	
PERCH CHANNEL CODE	とまり木チャネル番号	第M番目 Mth	
PERCH CHANNEL CODE	位置登録タイマー		
PERCH CHANNEL CODE	拡張情報要素 (K)	0~127	
PERCH CHANNEL CODE	(拡張情報要素)		オペレータオプション用
ADDITIONAL INFORMATION ENTRY			OPERATOR OPTION
LOCATION REGISTRATION TIMER			

PERCH CHANNEL CODE

報知情報の例

MESSAGE CODE	INFORMATION ENTRY	DIRECTION	REMARKS
MESSAGE CODE	情報要素	方 向	備 考
NETWORK CODE	メッセージ種別	下り	DOWNSTREAM
RESTRICTION INFORMATION	網番号		
	規制情報		
	制御チャネル構造情報		
	移動局送信電力指定		制御チャネル用
	待ち受け許可レベル		WAIT ENABLED LEVEL
	待ち受け劣化レベル		WAIT DISABLED LEVEL
MAXIMUM REPORTED NUMBER OF CHANNELS	位置登録エリア多重数 (N)		1, 2, 4, 8 or 16
PERCH CHANNEL CODE	位置番号 LOCATION		第1番目 1st
	CODE	S	
	位置番号		第n番目 nth
	最大報告チャネル数		0 ~ M
	在園ゾーン/セクタ判定用 とまり木チャネル数 (M)		0 ~ 20 1st
	とまり木チャネル番号		第1番目 (選択優先順位順に送出)
		S	
	とまり木チャネル番号		第M番目 Mth
	位置登録タイマ		
	拡張情報要素 (K)		0 ~ 127
	(拡張情報要素)	↓	オペレータオプション用
	ADDITIONAL INFORMATION ENTRY		OPERATOR OPTION
	LOCATION REGISTRATION TIMER		

CONTROL CHANNEL  
CONFIGURATION INFORMATION

MOBILE STATION TRANSMISSION POWER SPECIFICATION  
FOR CONTROL CHANNEL

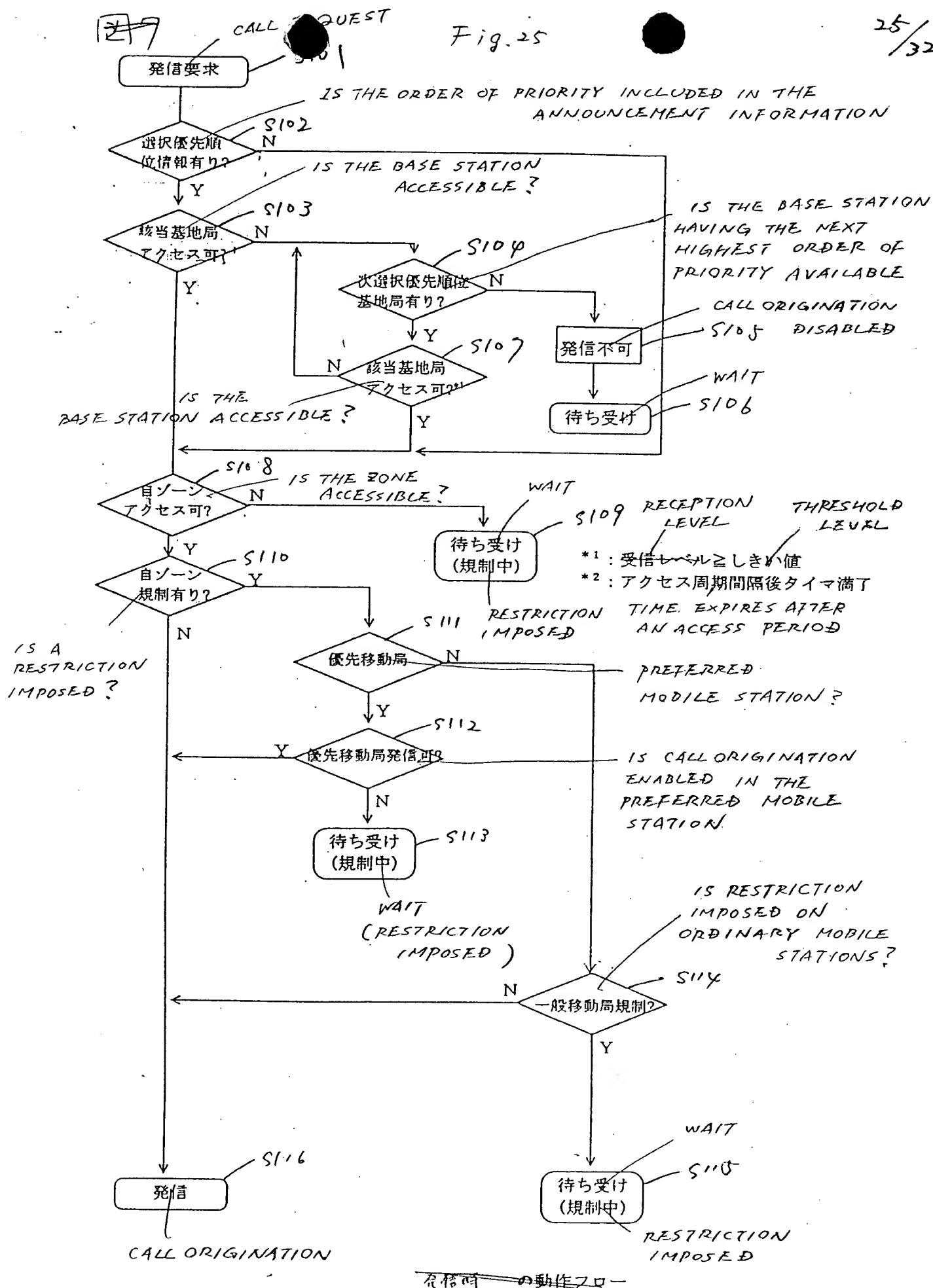
LOCATION REGISTERED AREA  
MULTIPLEX LEVEL  
NUMBER OF PERCH CHANNELS TO BE SEARCHED FOR DETERMINATION OF A ZONE  
(TRANSMITTED IN THE DESCENDING ORDER OF PRIORITY)

MESSAGE TYPE	INFORMATION ENTRY	DIRECTION	REMARKS
報知情報の例	情報要素	方向	備考
MESSAGE TYPE	メッセージ種別	下り	
NETWORK CODE	網番号		CONTROL CHANNEL CONFIGURATION INFORMATION
RESTRICTION INFORMATION	規制情報		MOBILE STATION TRANSMISSION POWER SPECIFICATION
	制御チャネル構造情報		FOR CONTROL CHANNEL
	移動局送信電力指定		制御チャネル用
	待ち受け許可レベル		WAIT ENABLED LEVEL
	待ち受け劣化レベル		WAIT DISABLED LEVEL
MAXIMUM REPORTED NUMBER OF CHANNELS	位置登録エリア多重数 (N)		1, 2, 4, 8 or 16
SEARCH CHANNEL CODE	位置番号 LOCATION		第1番目 (1)
SEARCH CHANNEL CODE	S CODE	S	
SEARCH CHANNEL CODE	位置番号	第N番目 (n)	
SEARCH CHANNEL CODE	最大報告チャネル数	0~M	
SEARCH CHANNEL CODE	在図ゾーン/セクタ判定用 とまり木件数 (M)	0~20	NUMBER OF PERCH CHANNELS TO BE SEARCHED FOR DETERMINATION OF A ZONE
SEARCH CHANNEL CODE	とまり木チャネル番号	第1番目 1st	
SEARCH CHANNEL CODE	選択優先順位情報	(第1番目とまり木チャネルの優先順位情報)	
SEARCH CHANNEL CODE	S	S	
SEARCH CHANNEL CODE	とまり木チャネル番号	第M番目 Mth	
SEARCH CHANNEL CODE	選択優先順位情報	(第M番目とまり木チャネルの優先順位情報)	
SEARCH CHANNEL CODE	位置登録タイマ		
SEARCH CHANNEL CODE	拡張情報要素 (K)	0~127	
SEARCH CHANNEL CODE	(拡張情報要素)	オペレータオプション用	INFORMATION INDICATING THE ORDER OF PRIORITY OF THE 1st PERCH CHANNEL
ADDITIONAL INFORMATION ENTRY		OPERATOR OPTION	
INFORMATION INDICATING THE ORDER OF PRIORITY		LOCATION REGISTRATION TIMER	INFORMATION INDICATING THE ORDER OF PRIORITY OF THE Mth PERCH CHANNEL

CALL REQUEST

Fig. 25

25/32



7/

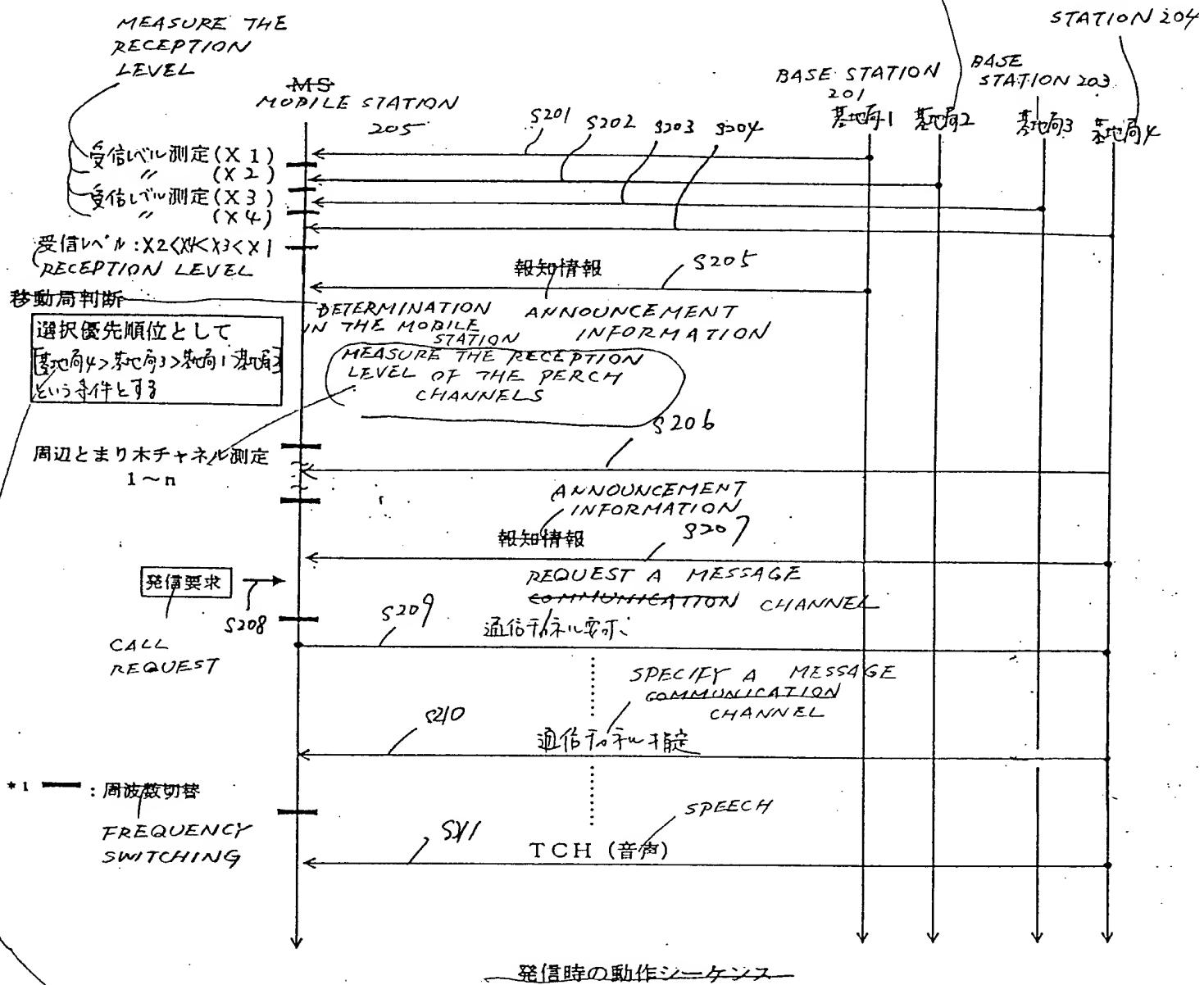
21/8

Fig. 26

BASE STATION 202

26/32

BASE STATION 204



THE ORDER OF PRIORITY:

BASE STATION 204 &gt; BASE STATION 203 &gt; BASE STATION 201 &gt; BASE STATION 202

IS ASSUMED

~~21.9~~ MOBILE STATION IS  
CALLING  
移動局呼出し S301

Fig. 27

27/32

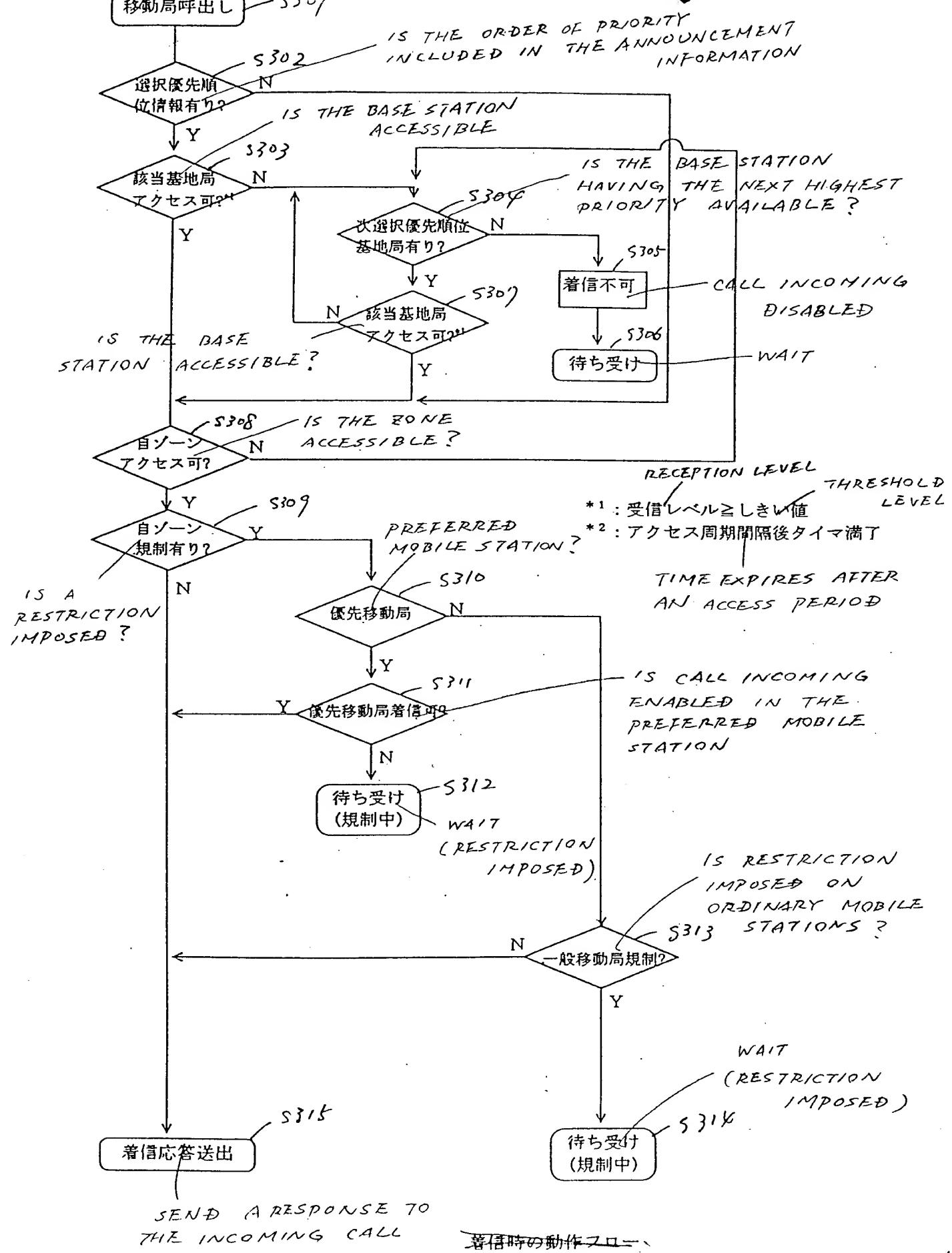
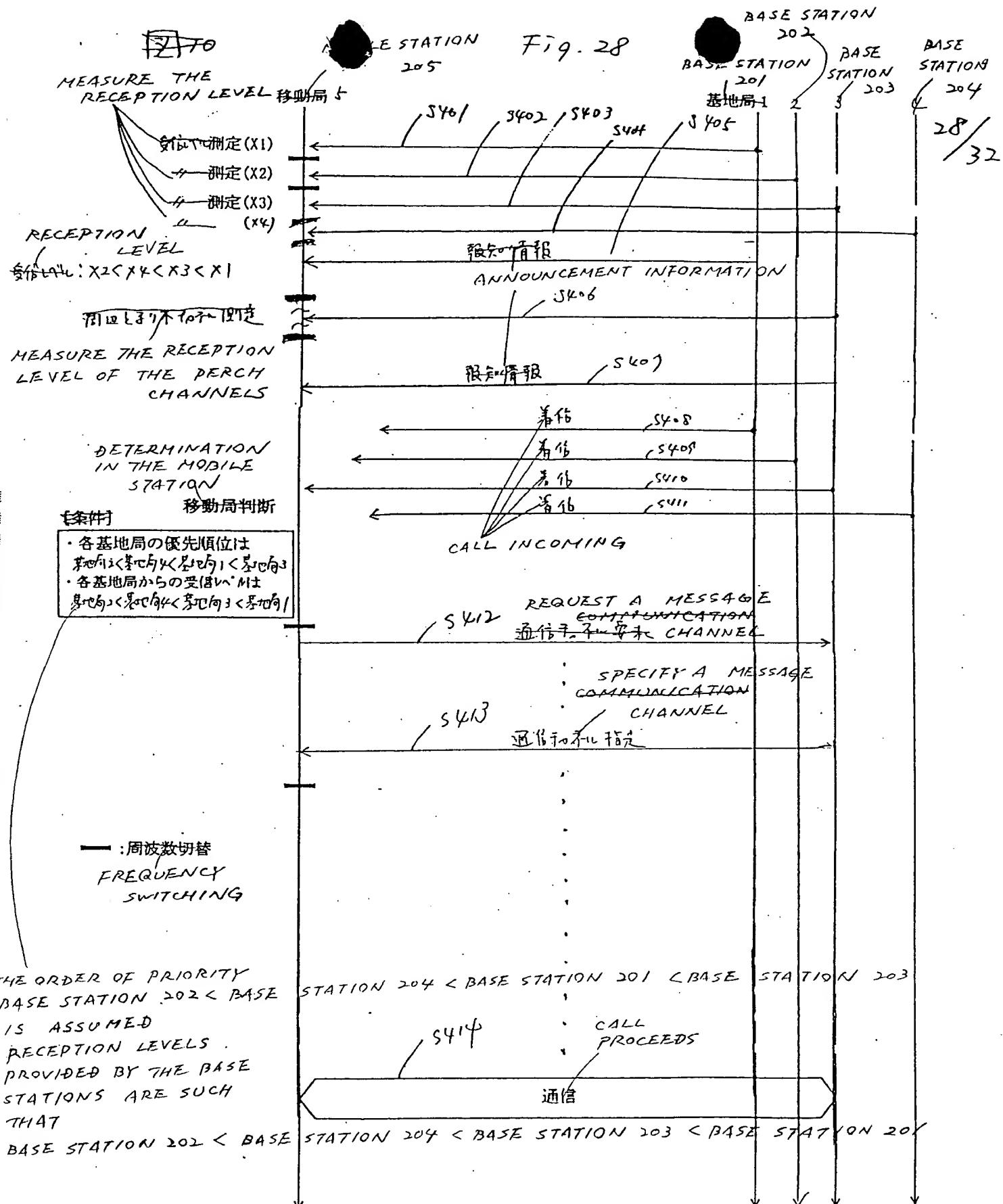
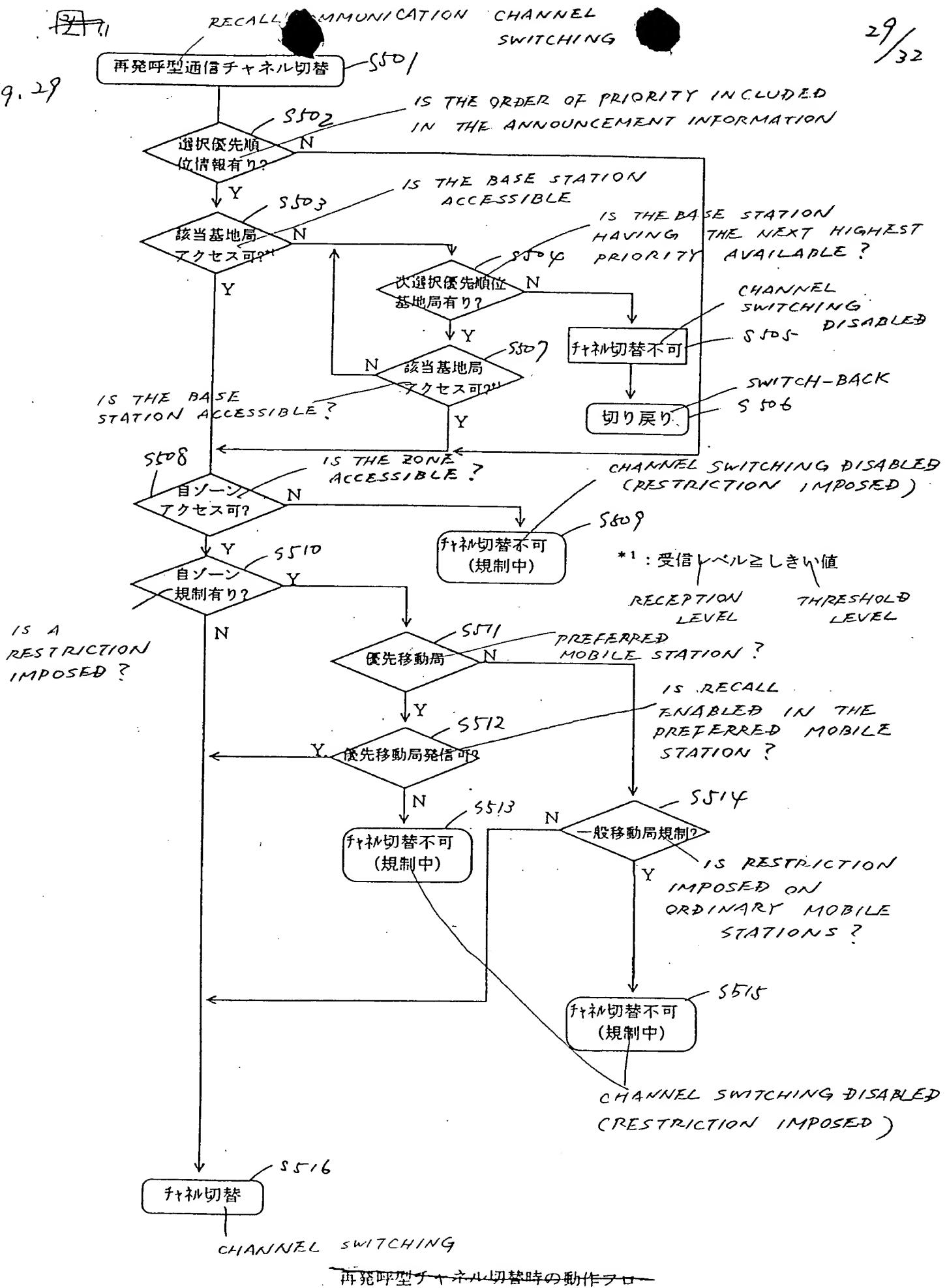


Fig. 28

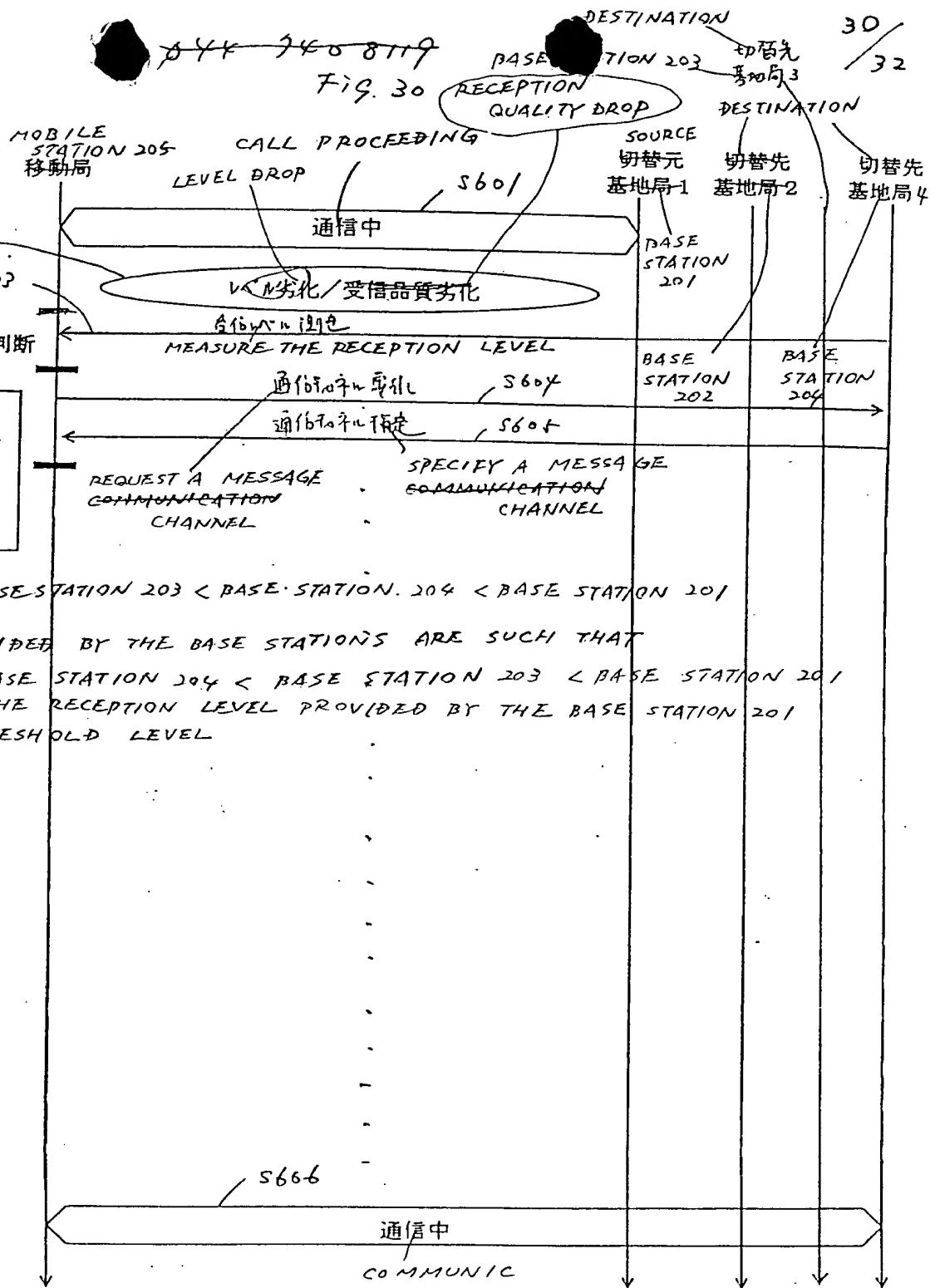


着信時の動作

Fig. 29



22



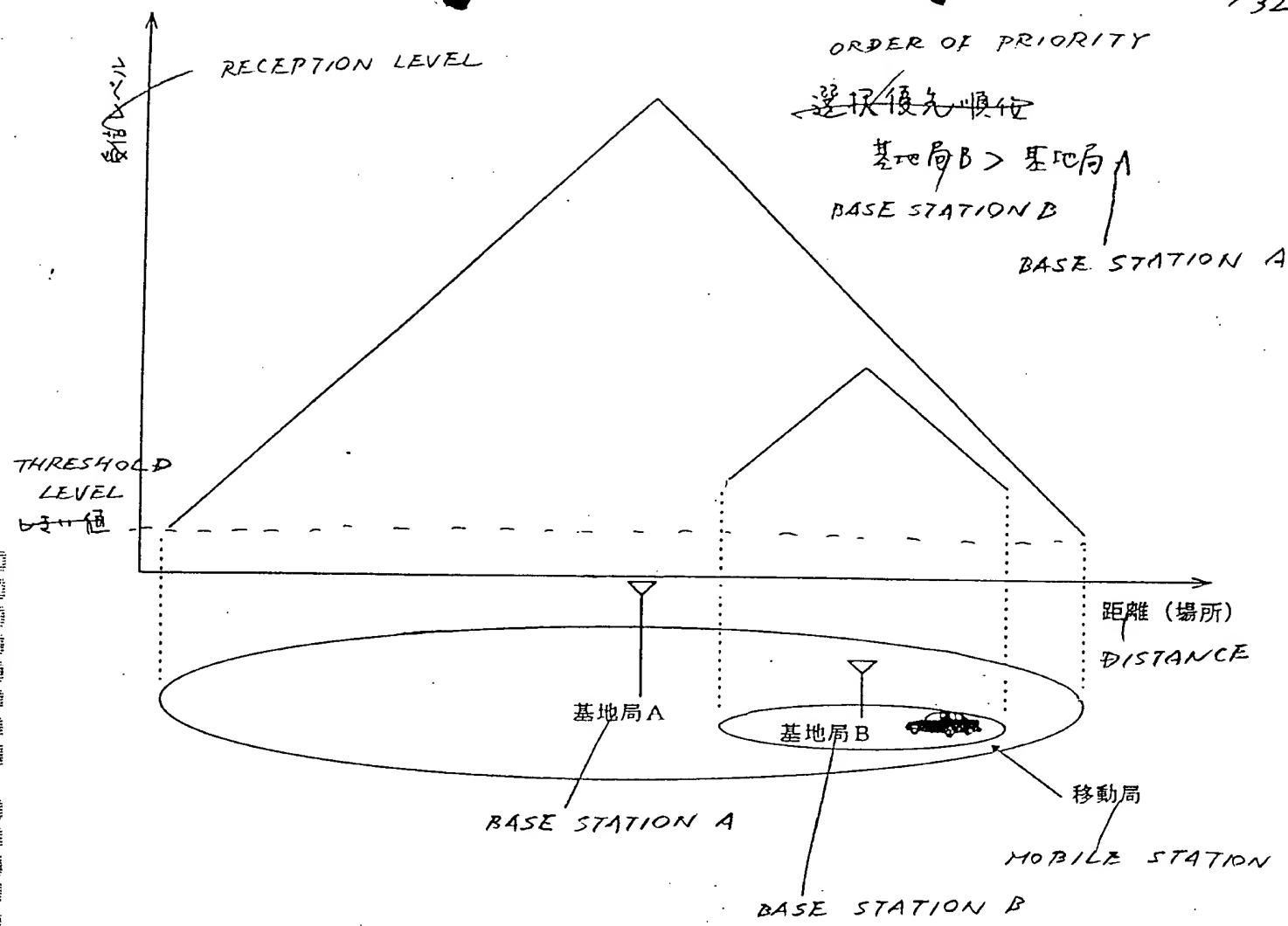


Fig. 32

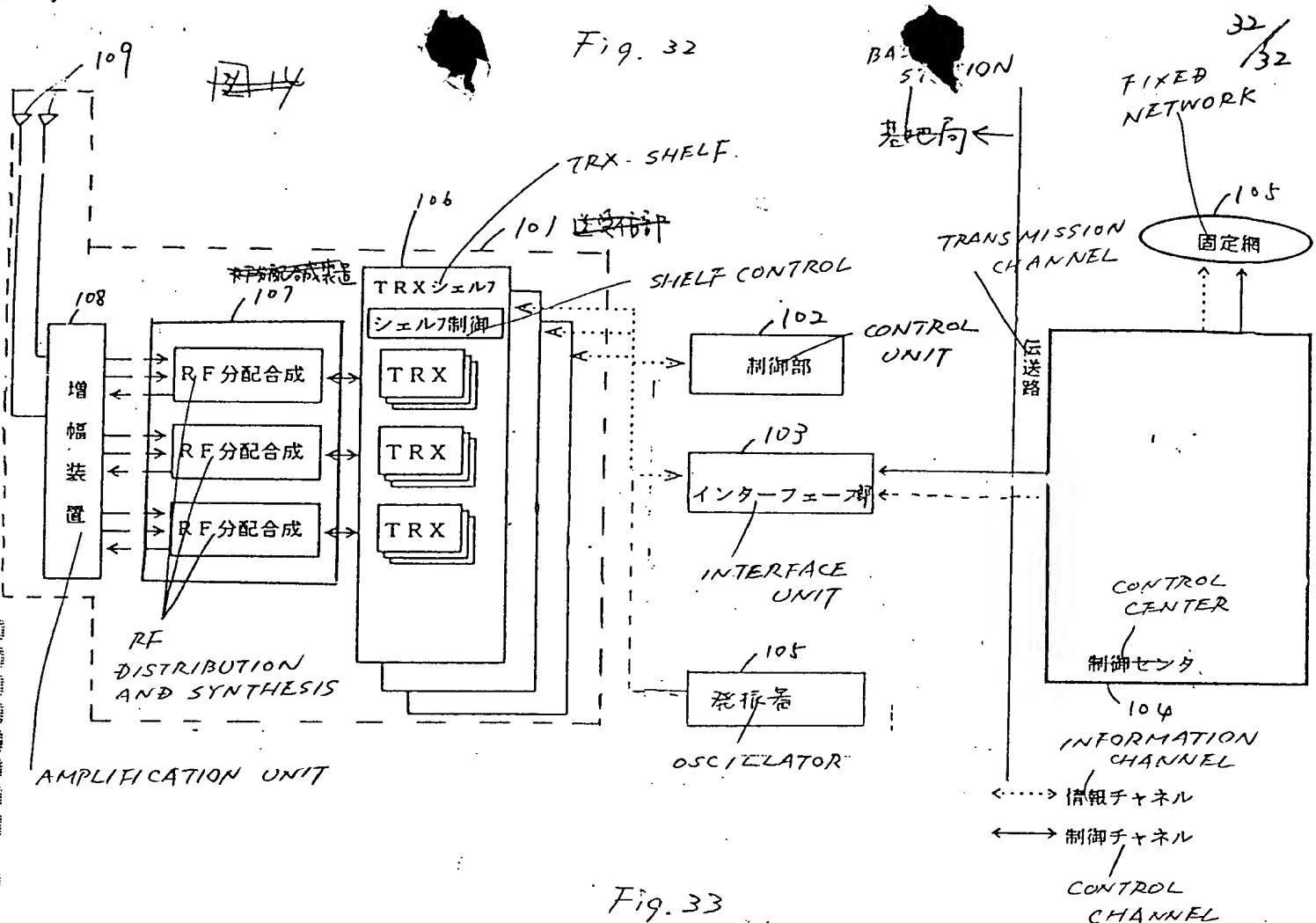


Fig. 33

